

# **Enterprise Service Specification**



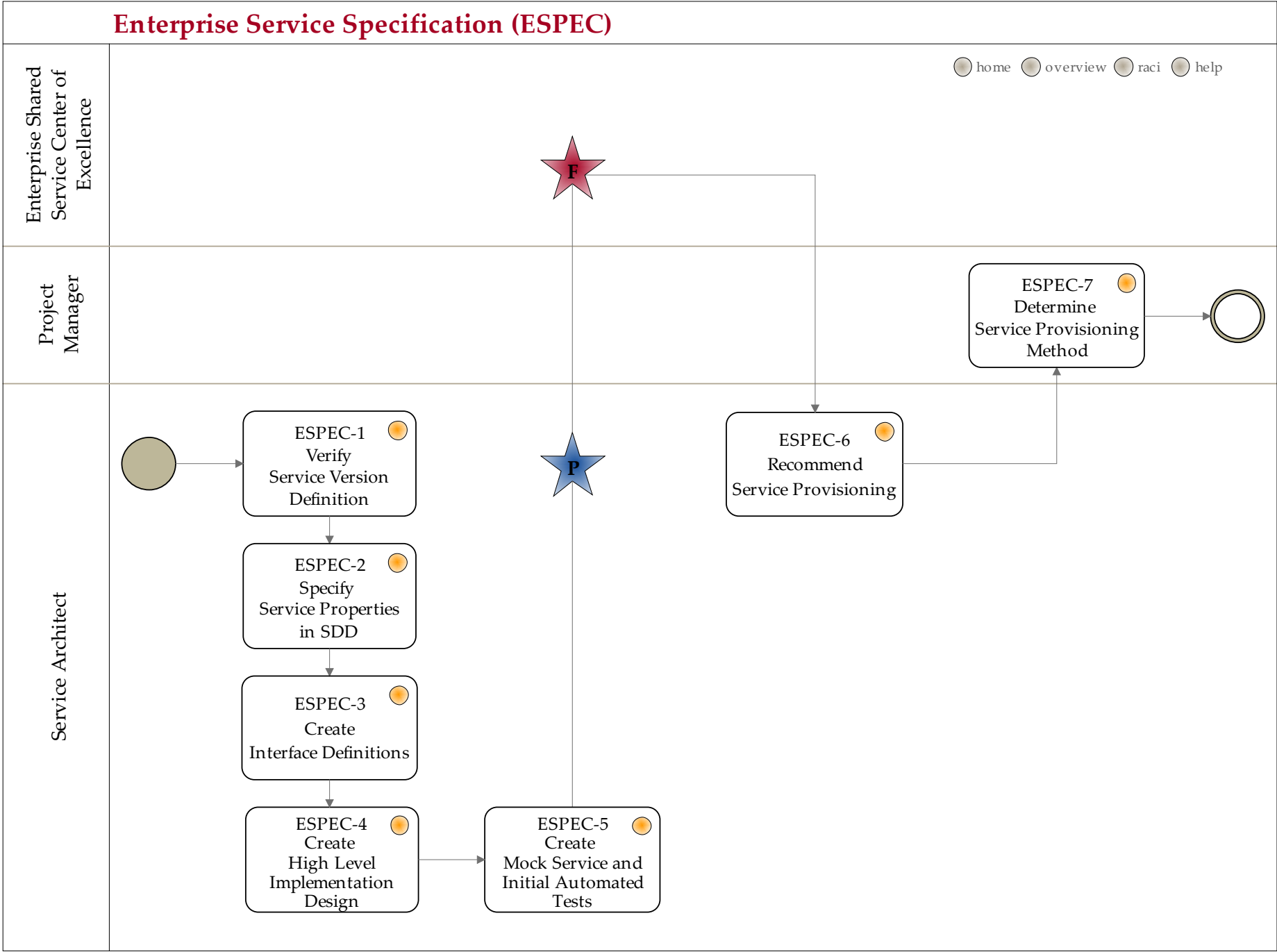
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# Enterprise Service Specification Process Map



# **Process: Enterprise Service Specification**

Overview: The process map for Enterprise Service Specification cycles through the following process and review activities:

ESPEC-1 Verify Service Version Definition

ESPEC-2 Specify Service Properties in SDD

ESPEC-3 Create Interface Definitions

ESPEC-4 Create High Level Implementation Design

ESPEC-5 Create Mock Service and Initial Automated Tests

ESPEC-PR1 Conduct Peer Review of Service Specification Compliance

ESPEC-FR1 Conduct Formal Review of Service Specification Compliance

ESPEC-6 Recommend Service Provisioning

ESPEC-7 Determine Service Provisioning Method

# **Enterprise Service Specification Description and Goals**

## **Description**

The Enterprise Service Specification (ESPEC) process refines the preliminary requirements for a Service and produces descriptions in sufficient detail to define the messages, message content, and resulting behavior per the Service Charter. When services are reused, any additional requirements are addressed in the Service Description and new Service version process. The ESPEC process verifies that the new or enhanced service follows the architectural principles and standards as specified in the enterprise Messaging Infrastructure (eMI) governance and the VA Enterprise Architecture (EA) Enterprise Technical Compliance Criteria. The provisioning method for delivering the service is selected.

The ESPEC process is initiated by an approved project Business Requirements Document at Milestone 0. The Service Description and system design aspects are completed prior to Milestone 1.

The Enterprise Shared Service Center of Excellence (ESS-CoE) maintains governance over service specifications using the ESPEC process.

## **Goals**

The goals of the Enterprise Service Specification process are to:

- Provide specific interface information, security requirements, and behavior information to allow the Service Integrator to complete the service Provisioning Phase of the Service Planning and Development Lifecycle
- Create or associate the design diagrams, applicable technical specifications, and service operations for the service
- Identify design dependencies associated with the service
- Define the service interface messages, message content and behavior
- Provide the essential information needed to determine the appropriate provisioning method for the service

# **Enterprise Service Specification RACI Information**

The following describes the RACI information for this process:

## **ESPEC-1 Verify Service Version Definition**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Business Analyst, Business Owner, Service Owner

## **ESPEC-2 Specify Service Properties in SDD**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Business Analyst, Business Owner, Service Consumer, Service Owner

## **ESPEC-3 Create Interface Definitions**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Service Integrator

Informed Role: Enterprise Shared Service Center of Excellence, Service Consumer, Service Owner

## **ESPEC-4 Create High Level Implementation Design**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Service Integrator

Informed Role: Service Consumer

## **ESPEC-5 Create Mock Service and Initial Automated Tests**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Service Provider

Informed Role: Service Consumer, Service Integrator

### **ESPEC-PR1 Conduct Peer Review of Service Specification Compliance**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Informed Role: Service Integrator

### **ESPEC-FR1 Conduct Formal Review of Service Specification Compliance**

Responsible Role: Enterprise Shared Service Center of Excellence

Accountable Role: Chairs, Enterprise Shared Services Center of Excellence

Consulted Role: Service Architect

Informed Role: Business Owner, Domain Related FoSIM Team, Project Manager, Service Integrator, Service Owner, Service Provider

### **ESPEC-6 Recommend Service Provisioning**

Responsible Role: Service Architect

Accountable Role: Domain Related FoSIM Team

Consulted Role: Service Provider

Informed Role: Service Consumer, Service Integrator

### **ESPEC-7 Determine Service Provisioning Method**

Responsible Role: Project Manager

Accountable Role: Service Owner

Consulted Role: Service Integrator, Service Provider

Informed Role: Business Owner, Domain Related FoSIM Team, Enterprise Shared Service Center of Excellence, Service Architect

# **Enterprise Service Specification Process**

## **Process Activity Name: ESPEC-1 Verify Service Version Definition**

### **Previous Process Activity**

None

### **Next Process Activity**

ESPEC-2 Specify Service Properties in SDD

### **Description**

The Service Architect reviews the Requirements Specification Document, for System or Epic, the associated Service Description (for a new service version), and verifies the software capability for the service is adequate for the service definition and Service Charter contained in the Service Description. The Service Description defines the set of operations needed independent of technology solutions. The review of the Service Description ensures the service identification characteristics and assigned service responsibilities are accurate, business function(s) satisfied by the service are defined, service version is defined, service type is correct, and the Quality of Service requirements are included. The Service Registration is updated as needed. For services that are in an operational phase, the current Service Level Agreement is verified and revised if needed.

### **Artifacts Used**

Business Requirements Document  
Requirements Specification Document  
Service Description(s)  
Service Level Agreement(s)  
Service Registration

### **Artifacts Created**

Service Description(s) (Updated)  
Service Level Agreement(s) (New or Updated)  
Service Registration (Updated)  
WebSphere Service Registry and Repository (WSRR) Role Request Form

### **Responsible Role**

Service Architect

### **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard



VA EA Home

## **Standards**

None Listed

## **More Info**

The ESS Strategy is referenced on the VA EA ESS Center of Excellence page.

Refer to the eMI WIKI Technical Corner How To? and eMI SOA Governance sections for services creation methods and policies for design-governance of SOA-based services.

For Developer access to the Service Registry, new users need to complete the WebSphere Service Registry and Repository (WSRR) Role Request Form and submit to the VA eMI Support mail group.

## **Process Activity Name: ESPEC-2 Specify Service Properties in SDD**

### **Previous Process Activity**

ESPEC-1 Verify Service Version Definition

### **Next Process Activity**

ESPEC-3 Create Interface Definitions

### **Description**

The Service Architect references the Service Description, Service Roadmap, and includes relevant service identification information in the high-level System Design Document (SDD) with service level definition section from the Service Description.

For services in production, production service's Service Description is referenced in the SDD and a link to the Service Description is provided.

### **Artifacts Used**

Service Description(s)  
Service Level Agreement(s)  
Service Roadmap(s)  
System Design Document

### **Artifacts Created**

System Design Document (Updated)

## **Responsible Role**

Service Architect

## **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home

One-VA Technical Reference Model

Rational Software Architect

Service Registry Dashboard

Technical Services Project Repository (TSPR)

VA EA ESS Center of Excellence

VA EA Home

## **Standards**

None Listed

## **More Info**

The System Design Document template includes a section, Service Oriented Architecture / Enterprise Shared Service (ESS) Detailed Design, for service identification.

Refer to the eMI WIKI Technical Corner How To? and eMI SOA Governance sections for services creation methods and policies for design-governance of SOA-based services.

## **Process Activity Name: ESPEC-3 Create Interface Definitions**

### **Previous Process Activity**

ESPEC-2 Specify Service Properties in SDD

### **Next Process Activity**

ESPEC-4 Create High Level Implementation Design

### **Description**

The Service Architect creates service interface definitions and service operation specifications which are adequate for use by service consumers. These are added to the Services Description and the service specification and implementation architecture views are revised as needed.

### **Artifacts Used**

Service Description(s)

Service Implementation Architecture

Service Specification Architecture

## **Artifacts Created**

Service Description(s) (Updated)  
Service Implementation Architecture (Updated)  
Service Specification Architecture (Updated)

## **Responsible Role**

Service Architect

## **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPR)  
VA EA ESS Center of Excellence  
VA EA Home

## **Standards**

None Listed

## **More Info**

Refer to the VA EA Home Enterprise Shared Services / Service Oriented Architecture (SOA) Organization for the Advancement of Structured Information Standards (OASIS) SOA Reference Model to explain the relationships and interfaces between service providers and consumers and SOA terminology.

Refer to the eMI WIKI Technical Corner How To? and eMI SOA Governance sections for services creation methods and policies for design-governance of SOA-based services.

## **Process Activity Name: ESPEC-4 Create High Level Implementation Design**

### **Previous Process Activity**

ESPEC-3 Create Interface Definitions

### **Next Process Activity**

ESPEC-5 Create Mock Service and Initial Automated Tests

### **Description**

The Service Architect reviews the Service Specification Architecture diagrams and the Service Implementation Architecture and provides a high level description of the interface components.

The Service Architect incorporates these into the Service Description and the service identification section of the System Design Document.

### **Artifacts Used**

Service Description(s)  
Service Implementation Architecture  
Service Specification Architecture  
System Design Document

### **Artifacts Created**

Service Description(s) (Updated)  
Service Implementation Architecture (Updated)  
Service Specification Architecture (Updated)  
System Design Document (Updated)

### **Responsible Role**

Service Architect

### **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPR)  
VA EA ESS Center of Excellence  
VA EA Home

### **Standards**

None Listed

### **More Info**

The System Design Document template includes a section, Service Oriented Architecture / Enterprise Shared Service (ESS) Detailed Design, for service identification.

Refer to the eMI Wiki Technical Corner How To? and eMI SOA Governance sections for services creation methods and policies for design-governance of SOA-based services.

## **Process Activity Name: ESPEC-5 Create Mock Service and Initial Automated Tests**

### **Previous Process Activity**

ESPEC-4 Create High Level Implementation Design

### **Next Process Activity**

ESPEC-PR1 Conduct Peer Review of Service Specification Compliance

### **Description**

The Service Architect creates a Mock Service that responds with standards messages that are sufficient to allow the Service Consumers to test their usage of service within the solution. The Mock Service allows for the generation of an initial set of automated tests for use prior to the completion the remaining service provisioning activities.

### **Artifacts Used**

Service Description(s)  
Service Implementation Architecture  
Service Specification Architecture

### **Artifacts Created**

Initial Automated Tests  
Mock Service  
Service Description(s) (Updated)

### **Responsible Role**

Service Architect

### **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
IBM Rational Team Concert/Change and Configuration Management (RTC/CCM)  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPR)  
VA EA ESS Center of Excellence  
VA EA Home

### **Standards**

None Listed

## **More Info**

Refer to the One-VA Technical Reference Model for approved system testing tools that may be useful for developing the Mock Service and Initial Automated Tests.

Refer to the eMI WIKI Technical Corner for additional guidance.

## **Process Activity Name: ESPEC-PR1 Conduct Peer Review of Service Specification Compliance**

### **Previous Process Activity**

ESPEC-5 Create Mock Service and Initial Automated Tests

### **Next Process Activity**

ESPEC-FR1 Conduct Formal Review of Service Specification Compliance

### **Description**

The Service Architect has another Service Architect review Service Description and System Design Document for consistency. The service design, the Service Implementation Architecture and Service Specification Architecture are reviewed by the Integrated Project Team and for accuracy and completeness for the Service Description. The Service Architect has the documents review findings and resolves the inconsistencies uncovered during the review. When the review findings are addressed, the Service Architect informs Enterprise Shared Service Center of Excellence, Service Owner, and other stakeholders that the service is ready for a formal Service Specification Compliance Review. The Service Architect updates the Service Registry and verifies all required documents have been checked into the Technical Services Project Repository (TSPR).

### **Artifacts Used**

Initial Automated Tests  
Mock Service  
Service Description(s)  
Service Implementation Architecture  
Service Registry Entry  
Service Specification Architecture  
System Design Document

### **Artifacts Created**

Initial Automated Tests (Updated)  
Mock Service (Updated)  
Review Findings Summary  
Service Implementation Architecture (Updated)  
Service Registry Entry (Updated)  
Service Specification Architecture (Updated)  
System Design Document (Updated)

## **Responsible Role**

Service Architect

## **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home

IBM Rational Team Concert/Change and Configuration Management (RTC/CCM)

One-VA Technical Reference Model

Rational Software Architect

Service Registry Dashboard

Technical Services Project Repository (TSPR)

VA EA ESS Center of Excellence

VA EA Home

## **Standards**

Quality Assurance Standard

## **More Info**

Refer to the eMI Wiki Technical Corner, eMI Software Oriented Architecture (SOA) Governance section for policy and guidelines.

## **Process Activity Name: ESPEC-FR1 Conduct Formal Review of Service Specification Compliance**

### **Previous Process Activity**

ESPEC-PR1 Conduct Peer Review of Service Specification Compliance

### **Next Process Activity**

ESPEC-6 Recommend Service Provisioning

## **Description**

The Enterprise Shared Service Center of Excellence (ESS-CoE) conducts and facilitates a formal review of the service design for compliance with the enterprise Messaging Infrastructure policies and guidelines and the VA Enterprise Architecture (EA) Enterprise Technical Architecture (ETA) Compliance Criteria. The ESS-CoE assigns appropriate Service Architects and Subject Matter Experts to conduct the review of the Service Description, related service specification documents, and the System Design Document for compliance. The ESS-CoE issues an Assertion of Design Compliance against the System Design Document which authorizes development to begin in the Provisioning Phase.

## **Artifacts Used**

Initial Automated Tests

Mock Service

Review Findings Summary

Service Description(s)  
Service Implementation Architecture  
Service Specification Architecture  
System Design Document

### **Artifacts Created**

Assertion of Design Compliance

### **Responsible Role**

Enterprise Shared Service Center of Excellence

### **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
IBM Rational Team Concert/Change and Configuration Management (RTC/CCM)  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPR)  
VA EA ESS Center of Excellence  
VA EA Home

### **Standards**

Quality Assurance Standard  
VA EA Enterprise Technical Architecture (ETA) Compliance Criteria

### **More Info**

VA EA ESS Center of Excellence Charter describes roles and responsibilities.

## **Process Activity Name: ESPEC-6 Recommend Service Provisioning**

### **Previous Process Activity**

ESPEC-FR1 Conduct Formal Review of Service Specification Compliance

### **Next Process Activity**

ESPEC-7 Determine Service Provisioning Method

### **Description**

The Service Architect notifies the Service Owner that all service design elements are complete, service design compliance criteria has been met, and the service is ready to provision.



**Artifacts Used**

Assertion of Design Compliance  
Service Registry Entry

**Artifacts Created**

Notification of Service Ready for Provisioning  
Service Registry Entry (Updated)

**Responsible Role**

Service Architect

**Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
IBM Rational Team Concert/Change and Configuration Management (RTC/CCM)  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPR)  
VA EA ESS Center of Excellence  
VA EA Home

**Standards**

None Listed

**More Info**

Refer to the eMI WIKI Technical Corner, eMI Software Oriented Architecture (SOA) Governance section for policy and guidelines.

**Process Activity Name: ESPEC-7 Determine Service Provisioning Method****Previous Process Activity**

ESPEC-6 Recommend Service Provisioning

**Next Process Activity**

None

**Description**

The Project Manager uses the approved Service Description which includes the Service Charter to determine how to best achieve the service design by purchasing a Commercial Off-The-Shelf

(COTS) solution, reusing a Government off-the-shelf (GOTS) solution, or building a solution in-house. The Project Manager identifies the actions needed to provision the service(s) in accordance with the Service Charter(s). The Project Manager updates Service Description with the determination and proceeds to work with the Service Owner to initiate the actions needed to provision the Service.

### **Artifacts Used**

Notification of Service Ready for Provisioning  
Service Description(s)

### **Artifacts Created**

Estimated Resources and Funding for Service Provisioning  
Service Description(s) (Updated)  
Service Provisioning Method

### **Responsible Role**

Project Manager

### **Tools and Websites**

Enterprise Messaging Infrastructure (eMI) WIKI Home  
IBM Rational Team Concert/Change and Configuration Management (RTC/CCM)  
One-VA Technical Reference Model  
Rational Software Architect  
Service Registry Dashboard  
Technical Services Project Repository (TSPP)  
VA EA ESS Center of Excellence  
VA EA Home

### **Standards**

VA Enterprise Shared Services Strategy

### **More Info**

The Service Owner follows the VA Enterprise Shared Service Strategy in formulating Acquisition Strategy and an analysis of alternatives when the provisioning method is a buy of the service.

The provisioning method for enhancing an existing service is to reuse an existing service.

END OF PROCESS